

REMARKS

Applicants appreciate the Examiner's thorough examination of the present application. Applicants have amended Claims 12, 13, 17 and 43 as suggested in the Office Action. Applicants respectfully traverse the rejections of Claims 2, 3, 15, 16, 25, 26, 37, 38, 41 and 42 under 35 U.S.C. § 112, as the phrasing "a first one of" and "a second one of" is not indefinite. Applicants also traverse the antecedent basis rejections of Claims 20 and 21, as the "first and second signals" are properly introduced in Claim 20.

Applicants further traverse the rejections of the claims based on U.S. Patent No. 6,611,507 to Hottinen et al. (hereinafter "Hottinen"), as Hottinen describes a handoff procedure in which a mobile unit alternatively communicates with first and second base stations using respective different radio configurations at an accelerated data rate, thus failing to disclose or suggest, for example, "simultaneously communicating between the wireless terminal and respective ones of the first and second nodes according to the identified second radio configuration;" as recited in independent Claim 1, "handing off the wireless terminal from the first base station to the second base station based on the determination of whether a *common radio configuration* is available for the first and second base stations," as recited in independent Claim 14, "a radio configuration control circuit operative to identify a *common radio configuration* of the first set of radio configurations that is also a member of a second set of radio configurations supported by a second node and to responsively cause the first and second nodes to simultaneously communicate with the wireless terminal according to the identified common radio configuration," as recited in independent Claim 24, or related recitations of independent Claims 32, 36 and 40. Applicants further submit that several of the dependent claims have independent basis for patentability. Reasons supporting patentability of the claims are discussed in detail below.

The claim objections are overcome

Applicants have amended Claims 12, 13, 17 and 43 as suggested in the Office Action, thus overcoming the claim objections presented on page 2 of the Office Action.

Claims 2, 3, 15, 16, 20, 21, 25, 26, 37, 38, 41, and 42 are not indefinite

With respect to Claims 2, 3, 15, 16, 25, 26, 37, 38, 41 and 42, the Office Action asserts that the phrases "a first one" and "a second one" are indefinite. Applicants respectfully disagree.

Claim 2 recites:

A method according to Claim 1, wherein a first one of the first and second sets of radio configurations is constrained to radio configurations that are compliant with a wireless communications standard, and wherein a second one of the first and second sets of radio comprises radio configurations compliant with the wireless communications standard and radio configurations that are non-compliant with the wireless communications standard.

This claim indicates that "a first one" of the "first and second radio configurations", *i.e.*, either the first radio configuration or the second radio configuration, is "constrained to radio configurations that are compliant with a wireless communications standard". For example, the "first one" may include only configurations that are compliant with IS-95. As further recited, "a second one of the first and second sets of radio configurations", *i.e.*, the *other* one of the first and second sets of radio configurations, includes compliant and non-compliant configurations. For example, the "second one" of the first and second sets of radio configuration may be a set of IS-2000 compliant radio configurations that include configurations that are compliant with IS-95 and configurations that are not compliant with IS-95. The "first one/second one" phrasing indicates that the handover process may occur in either direction, *e.g.*, from an IS-95 base station to an IS-2000 base station, or vice versa. Applicants respectfully submit that, therefore, the phrasing of Claims 2, 3, 15, 16, 25, 26, 37, 38, 41 and 42 is not indefinite. Accordingly, Applicants respectfully request withdrawal of the §112 rejections of Claims 2, 3, 15, 16, 25, 26, 37, 38, 41 and 42.

The Office Action also asserts that the phrase "first and second signals" in Claims 20 and 21 has inadequate antecedent basis. Applicants respectfully traverse this rejection. The "first and second signals" are *new* elements that are introduced in Claim 20, and, therefore, do not require antecedent basis. The phrasing of these elements in Claim 20 does not presume antecedent basis, *i.e.*, they are not preceded by the definite article "the." Claim 21 recites "wherein receiving first and second signals transmitted by respective ones of the first and second base stations at the wireless terminal", which is a proper reference to method act recitations in Claim 20, *i.e.*,

"receiving first and second signals transmitted by respective ones of the first and second base stations at the wireless terminal." Accordingly, Applicants respectfully submit that the § 112 rejections of Claims 20 and 21 are erroneous, and request that they be withdrawn.

Independent Claims 1, 14, 24, 32, 36 and 40 are patentable over Hottinen

Independent Claims 1, 14, 24, 32, 36 and 40 stand rejected under 35 U.S.C. § 102 as being anticipated by Hottinen. Applicants respectfully traverse these rejections.

Claim 1 recites:

A method of communicating with a wireless terminal, the method comprising:

communicating between the wireless terminal and a first node according to a first radio configuration of a first set of radio configurations supported by the first node;

identifying a second radio configuration available for a second node that supports a second set of radio configurations that is different from the first set of radio configurations; and

simultaneously communicating between the wireless terminal and respective ones of the first and second nodes according to the identified second radio configuration.

An exemplary implementation of these recitations is described in the present application at page 11, lines 6-23:

FIG. 5 illustrates exemplary operations **500** for effecting a handoff from an IS-95 base station to an IS-2000 base station according to other embodiments of the present invention. A wireless terminal and an IS-95 base station communicate according to a first radio configuration (Block **510**). An IS-2000 base station is identified (Block **520**), for example, using RSSI and/or other criteria. If the first radio configuration is available for the IS-2000 base station (Block **530**), for example, if there is a Walsh coded channel available conforming to the first radio configuration, the wireless terminal communicates with respective ones of the IS-95 base station and the IS-2000 base station using the commonly supported first radio configuration (Block **560**). If the first radio configuration is not available for the IS-2000 base station, but a second commonly supported radio configuration is available (Block **550**), the wireless terminal communicates with respective ones of the IS-95 base station and the IS-2000 base station using the commonly supported second radio configuration (Block **560**). Subsequently, communications between the wireless terminal and the IS-95 base station may be terminated to complete handoff to the IS-2000 base station (Block **570**). If no commonly supported radio configuration is available (Block **540**), a hard handoff

procedure may be performed to achieve handoff to the IS-2000 base station (Block 550).

In sharp contrast, Hottinen describes a procedure in which a mobile unit is handed off from a frequency division duplex (FDD) base station to a time division multiplex (TDD) base station by alternately using respective FDD and TDD radio formats to communicate with the respective base station at temporarily increased (doubled) data rates. This is clearly illustrated in FIG. 9B of Hottinen, which shows that in a "DURING HANDOFF" interval, the data rate for communication with the FDD base station (over FDD frequencies f_{FDD1} , f_{FDD2}) using the FDD protocol is doubled (see items 918, 920), such that, in a given frame of X bits (element 900 in FIG. 9B), the mobile station can also communicate with the TDD station using the TDD protocol at a doubled rate (see item 922). Thus, Hottinen shows a process wherein a mobile station alternately communicates with two different base stations using two *different* radio configurations, which does not disclose or suggest, among other things "simultaneously communicating between the wireless terminal and respective ones of the first and second nodes according to the identified second radio configuration," as recited in Claim 1, or corresponding recitations in independent Claims 32 and 36.

Similar arguments support the patentability of independent Claims 14, 24 and 40 over Hottinen. For example, Claim 24 recites:

A wireless communications system, comprising:
a first node operative to communicate with a wireless terminal according to any of a first set of radio configurations; and
a radio configuration control circuit operative to identify a common radio configuration of the first set of radio configurations that is also a member of a second set of radio configurations supported by a second node and to responsively cause the first and second nodes to simultaneously communicate with the wireless terminal according to the identified common radio configuration.

Hottinen does not disclose or suggest identifying a common radio configuration for first and second nodes, and simultaneously using the common configuration to communicate between a terminal and first and second nodes. Rather, as noted above, Hottinen describes using two different radio configurations during a handover.

In light of the foregoing, Applicants submit that Hottinen fails to disclose or suggest the recitations of independent Claims 1, 14, 24, 32, 36 and 40, and that, therefore, independent Claims 1, 14, 24, 32, 36 and 40 are patentable over Hottinen.

The dependent claims are patentable

Applicants submit that dependent Claims 2-13, 15-23, 25-31, 33-35, 37-39 and 41-43 are patentable at least by virtue of depending from various ones of patentable independent Claims 1, 14, 24, 32, 36 and 40. Applicants further submit that several of the dependent claims have independent bases for patentability.

For example, in rejecting Claim 2, the Office Action concedes that Hottinen does not show the explicit recitations of Claim 2, but asserts that U.S. Patent No. 6,704,581 to Park et al. (hereinafter "Park") teaches such recitations. See Office Action, p. 7. Respectfully, Park does not disclose or suggest the explicit recitations of Claim 2 because the handover described in Park appears to be between base stations that do not support a common radio configuration. Accordingly, Applicants submit that the combination of Hottinen and Park does not disclose or suggest all of the recitations of Claim 2, and that, therefore, Claim 2 is patentable over the combination of Hottinen and Park. Similar arguments support the separate patentability of Claims 15, 25, 37, 39 and 41.

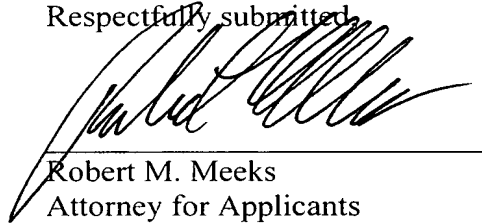
In rejecting Claims 4 and 19 based on a combination of Hottinen and U.S. Patent 6,493,554 to Kanerva et al. (hereinafter "Kanerva"), the Office Action asserts that Kanerva discloses common channel coding during a handoff, and that it would have been obvious to combine Kanerva with Hottinen "to provide an optimal way of performing handover." Office Action, p. 9. However, there is no motivation to combine Kanerva with Hottinen because Kanerva deals with intra-system handovers between GSM base stations, while Hottinen deals with inter-system handovers between systems operating under different standards. Moreover, the Office Action provides inadequate basis for the proposed combination of Hottinen and Kanerva, *i.e.*, to "provide an optimal way of performing handover," because this fails to provide the clear and particular evidence from the prior art of a motivation or suggestion to combine the references required to support a rejection under 35 U.S.C. § 103. For example, the Office Action fails to indicate where the cited references or other prior

art teach or suggest that such a combination would be optimal. For at least these additional reasons, Applicants submit that Claims 4 and 19 are patentable.

Conclusion

Applicants submit that the claims are in condition for allowance for at least the reasons discussed above. Applicants, therefore, request allowance of the claims and passing of the application to issue in due course. Applicants encourage the Examiner to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,



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